ABSTRACT

An optical filter comprising a slanted Bragg grating inscribed in an optical fiber portion comprising a core having a refractive index n_1 and a radius R_{core} and a cladding having an average refractive index n2 lower than n_1 and a radius $R_{cladding}$, the core and the cladding of the fiber being doped with a photosensitive dopant in the fiber portion comprising the Bragg grating, which filter is characterized in that, in the fiber portion comprising the Bragg grating, the photosensitivity of the cladding is greater than the photosensitivity of the core and the cladding includes an index step area having a refractive index n_3 greater than n_2 and less than n_1 , said index step area having a width L defined by an inside radius Rs1 greater than or equal to the radius Rcore of the core and an outside radius $R_{\rm s2}$ less than or equal to the radius R_{cladding} of the cladding.

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